



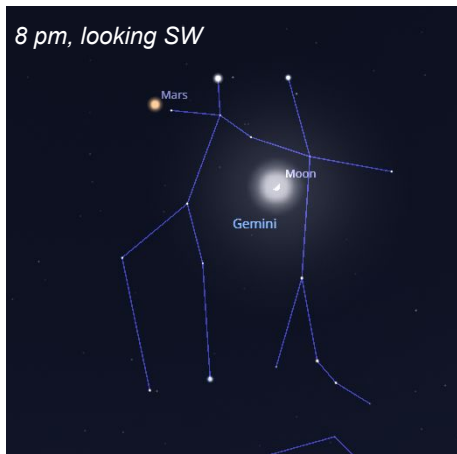
April 2025 Astronomy Report



- **Moon:**
 - Phases
- **Planets:**
 - Jupiter and Mars dominate the evening skies
 - Venus, Mercury, and Saturn make an early-morning appearance before sunrise
 - Neptune not visible early in the month, very challenging pre-dawn view by end of month
- **Comets/Asteroids/Meteor Showers:**
 - Lyrid meteor shower peaks in the third week of April
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 - Flora asteroid passing through the Leo Triplet
- **Public Viewing:**
 - Cub Lake, April 5
- **Dark Sky Viewing:**
 - Amberwood Ct, April 26

Moon - Phases

April 4 - First Quarter (Gemini)



April 12 - Full Moon (Virgo)



April 21 - Last Quarter (Capricornis)



April 27 - New Moon

Apogee (252K miles) - 13th
Perigee (222K miles) - 27th



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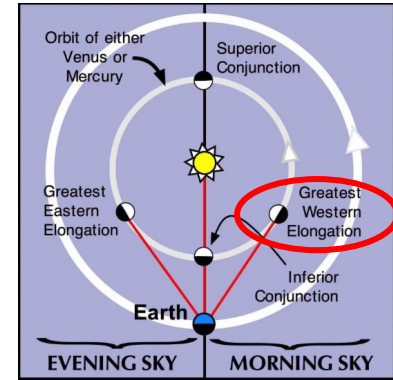
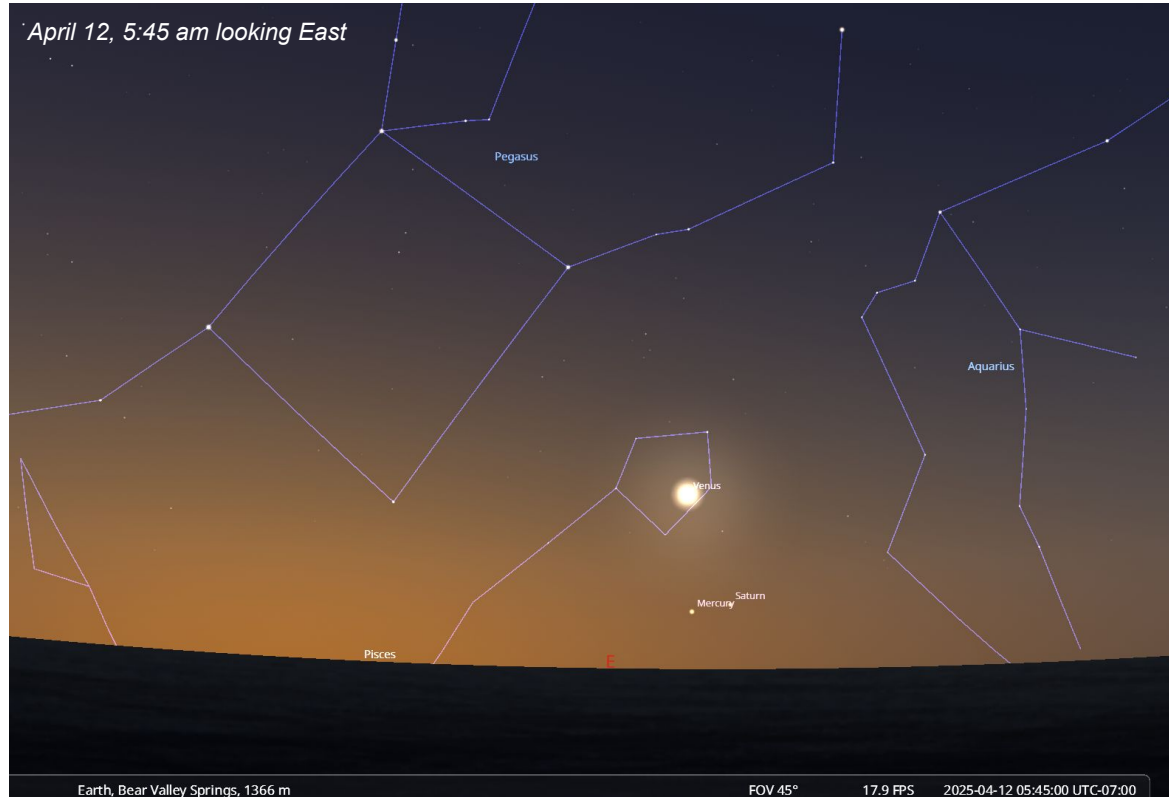
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Morning Planets: Venus/Mercury/Saturn - (Pisces)

Venus, Mercury, and Saturn reappear in the morning sky.

Mercury and Saturn stand side by side as a challenging viewing opportunity below bright Venus

April 12, 5:45 am looking East



Mercury reaches western elongation on April 21st.

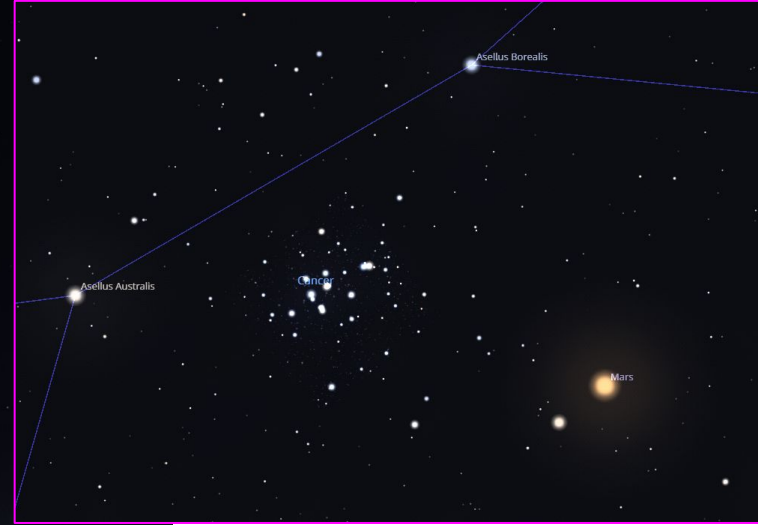
April 24, 5:30 am looking East



Evening Planets: Mars/Jupiter - (Cancer/Taurus)

*Jupiter & Mars both lose altitude in April; Jupiter sets by 10pm - Mars sets by 1am by the end of the month.
Jupiter located side-by-side with thin crescent Moon tonight (April 2) and April 30 (below).*

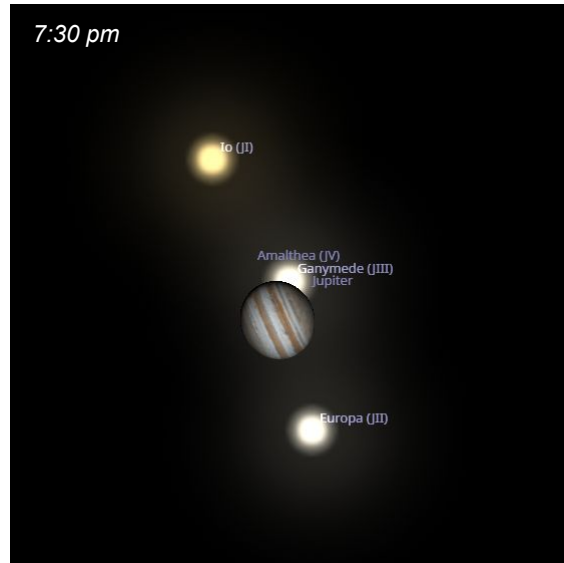
April 30, 9 pm looking West



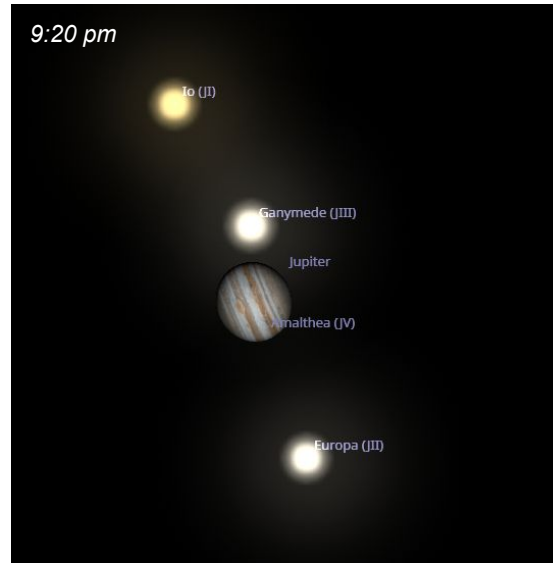
Mars is very close to M44 (Beehive Cluster)

Evening Planets: Jupiter - (Taurus)

Eclipse of Ganymede by Jupiter, April 5



Ganymede reappears from behind Jupiter



About 2 hours later, it starts to enter Jupiter's shadow which extends upward from our perspective

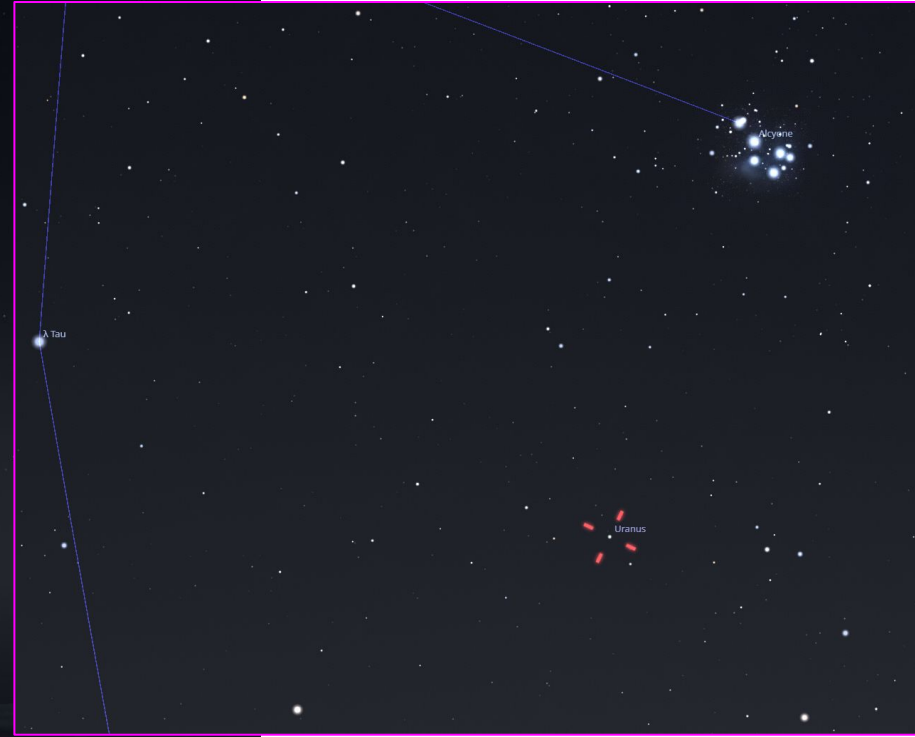
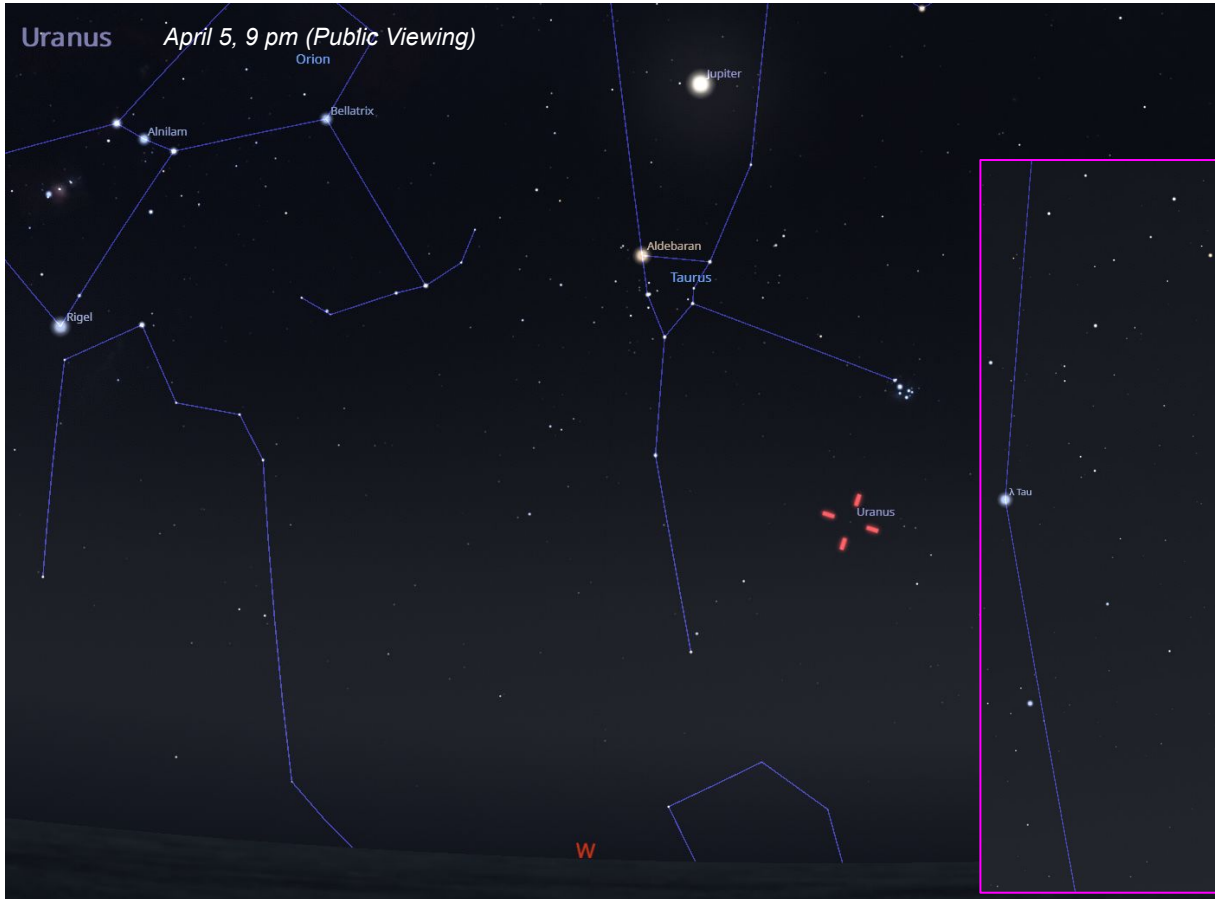


A few minutes later it disappears behind Jupiter's shadow

By the time Ganymede reappears around midnight Jupiter has set below the horizon

Evening Planets: Uranus - (Taurus)

Early April is the best opportunity to view Uranus (through binoculars). Becomes lost in twilight by the end of the month.





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Meteor Shower - Lyrid

- active April 14 - 30; peak date April 22 (waning crescent moon rises at 4am)
- peak rate ~20 meteors/hour an hour before dawn

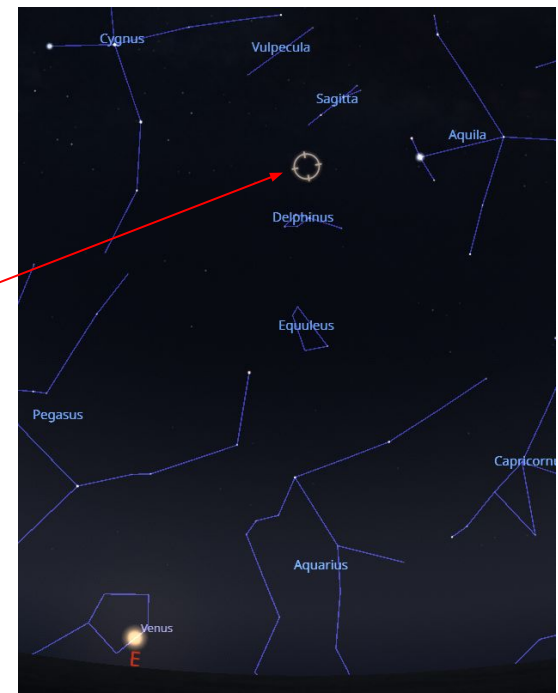
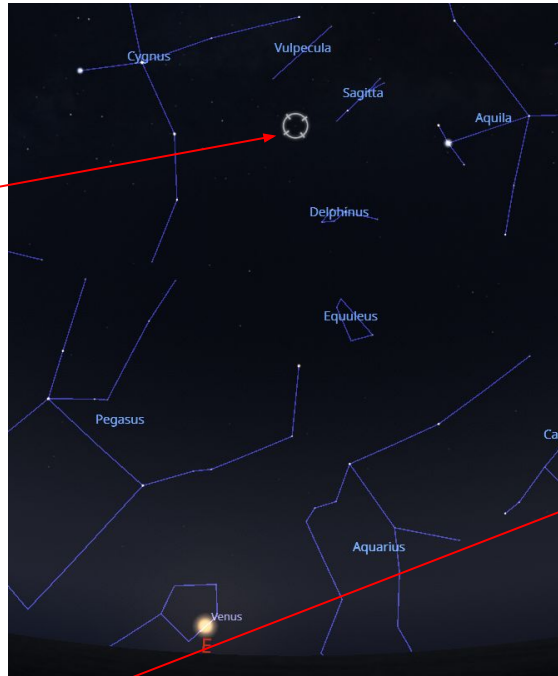
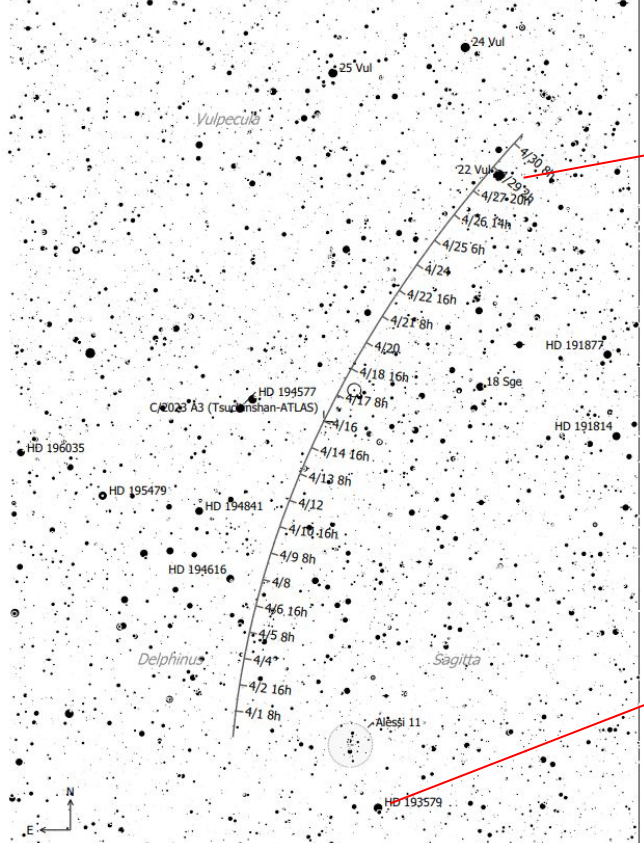
April 22, 3am



Comets - C/2023 A3 (Tsuchinshan ATLAS)

- Morning comet visible in a 6" telescope
- Begins the month in Delphinus at mag 12 with a 35" coma, diffuse condensation at center; fades slowly and ends up in Vulpecula by end of month

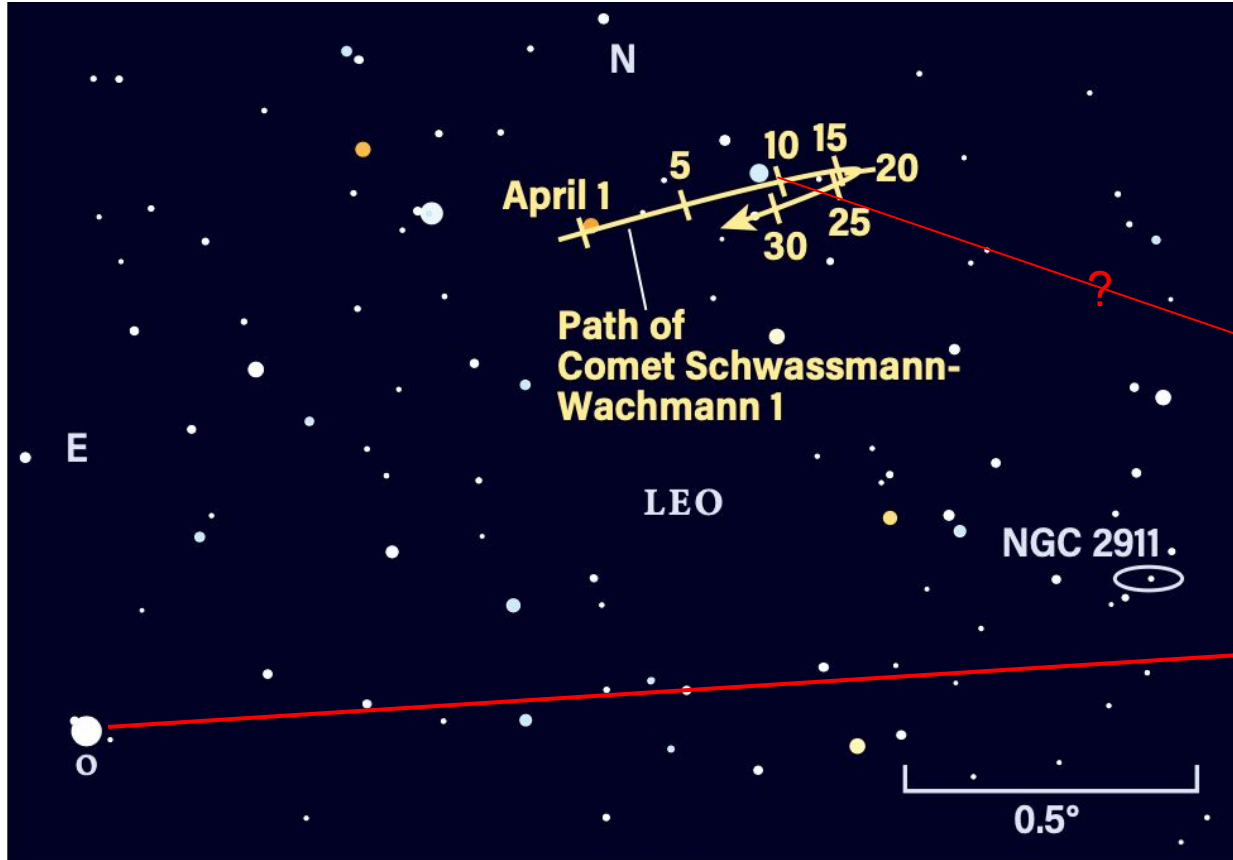
C/2023 A3 (Tsuchinshan-ATLAS)



Legend:
• Globule □ Ref. Neb. □ HI Region • Quasar ○ Galaxy • Mult. Star
• Open Cl. ◊ Dark Neb. □ SN Remnant • Planetary ○ Galaxy Gr. / Comet

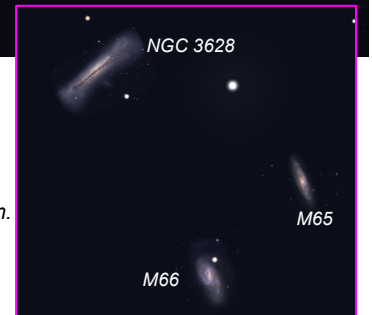
Comets - 29P/Schwassmann-Wachmann 1

- *Orbits between Jupiter & Saturn*
- *Displays irregular outbursts in brightness up to 11 mag 20-30 times per year*



Asteroid - 8 Flora

- Main belt asteroid 90 miles in diameter, discovered in 1847
- 6" telescope will reveal 10th mag dot in sparse star field; make a sketch with 3 or 4 dots, return another night to see it shift position



Flora passing through Leo Triplet from 8th - 11th. Two-hour session generates a 20"-long streak. Nearby Moon will lighten the background considerably.

Found in Leo this month, Flora is located near the Lion's back end, with several galaxies nearby. Credit: Astronomy: Roen Kelly



April 2025 Astronomy Report

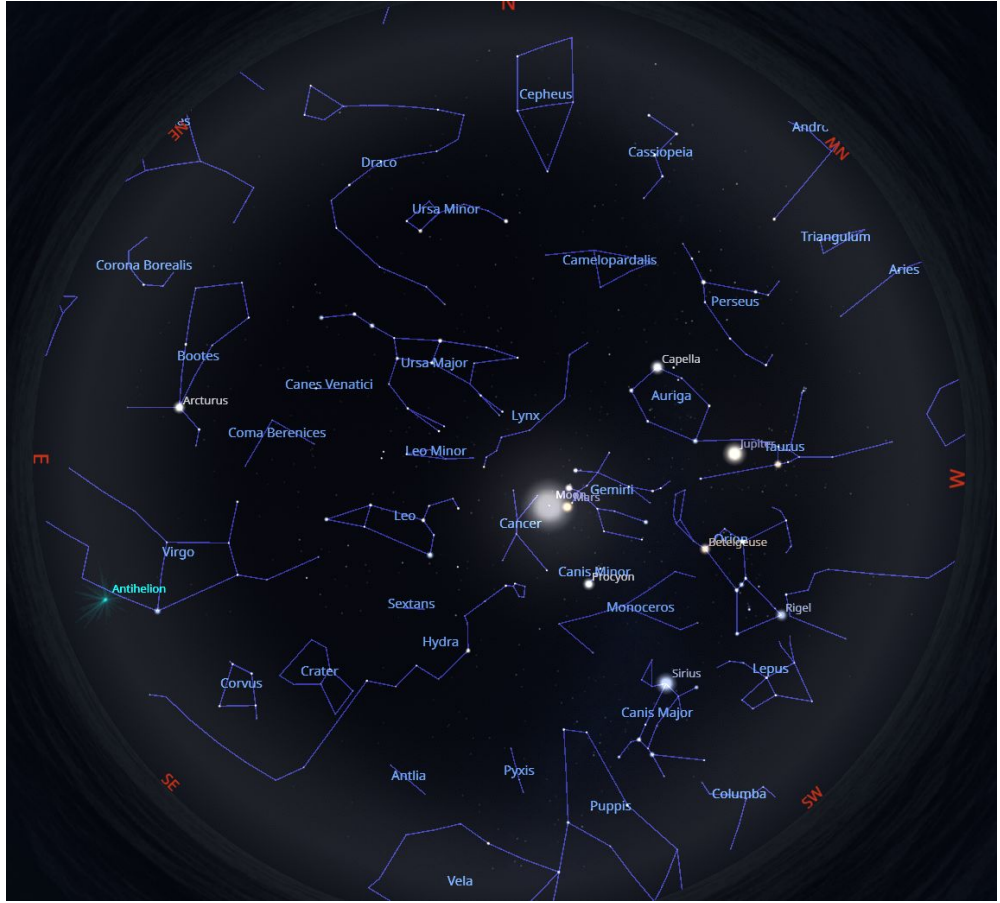


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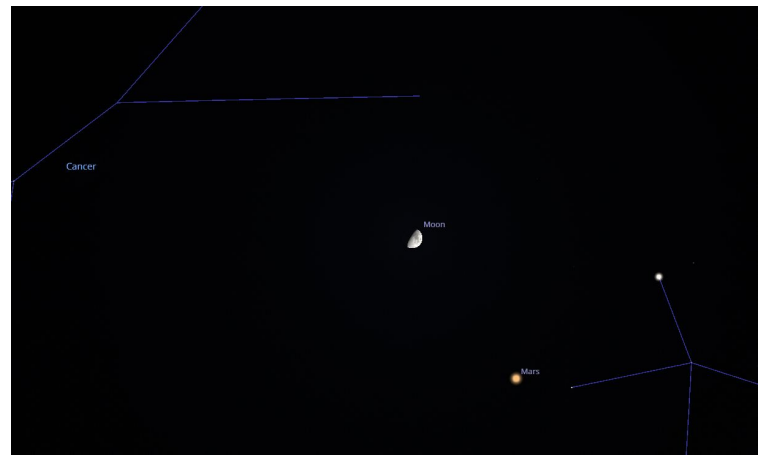
Public Viewing Cub Lake, April 5

Sunset 7:18 pm

Ps 19:2



Waxing 1st Qtr Moon next to Mars between Gemini & Cancer



Orion constellation, Jupiter in Taurus





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Dark Sky Viewing Amberwood Court, April 26

Ps 19:2

1 - M82 (Cigar Galaxy)

9 pm

3 - M97 (Owl Nebula)



Galaxy in Ursa Major
12MM light years from Earth (larger scopes)



Planetary nebula in Ursa Major
2000 light years from Earth
small telescopes

2 - M101 (Pinwheel Galaxy)

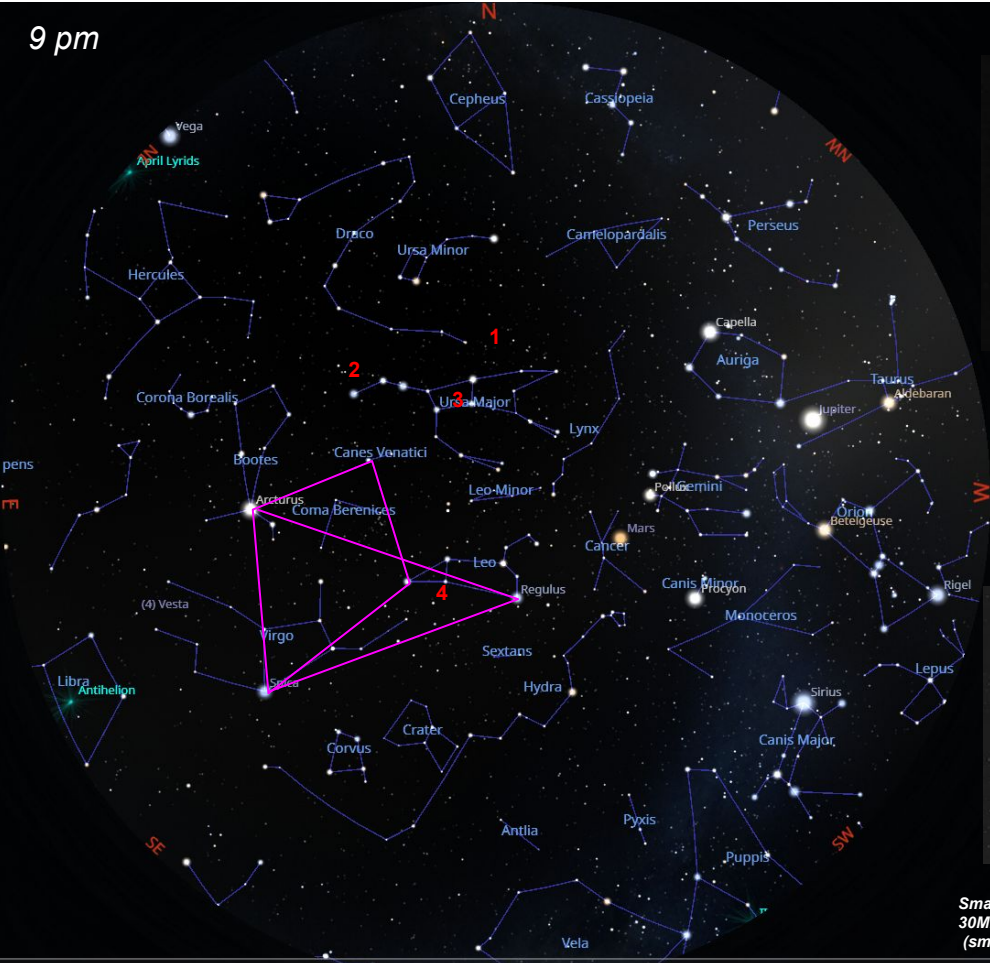


Face-on spiral galaxy in Ursa Major
21MM light years from Earth (small scopes)

4 - Leo Triplet



Small group of gravitationally bound galaxies in Leo
30MM light years from Earth
(small scopes - single field of view)



April 2025 Viewing Chronology

- 4 - 1st Qtr moon (*8 pm*)
- 5 - Public Viewing; Jupiter/Ganymede eclipse (*7:30 - 9:30 pm*)
- 12 - Venus/Mercury/Saturn (*5:45 am*); Full Moon (*9 pm*)
- 21 - Last Qtr Moon (*5 am*)
- 22 - Lyrid Meteor Shower peak (*3 am*)
- 24 - Venus/Mercury/Saturn/crescent Moon (*5:30 am*)
- 26 - Dark Sky Star Party (*9 pm*)
- 30 - Mars/Jupiter/M44 (*9 pm*)
- All Month - C/2023 A3 comet, 29/Schwassmann-Wachmann 1 comet, 8 Flora asteroid

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